



**United States Environmental Protection Agency
Region 1 - EPA New England
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Subj: Inspection Report
Hull Water Pollution Control Facility

From: David Turin

Thru: George Harding

To: File

I. Facility Information

A. Facility Name: Hull Water Pollution Control Facility

B. Facility Location: 1111 Nantasket Avenue
Hull, MA 02045

C. Facility Contacts: Frank Cavaleri, Area Manager, Woodard & Curran
980 Washington ST, Suite 325
Dedham, MA 02026
781-251-0200, fcavaleri@woodardcurran.com

Aram Varjabedian, Project Manager, Woodard & Curran
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D. NPDES ID Number: MA0101231

II. Background Information

A. Date and time of inspection:

Facility entrance: June 4, 2015, 9 am

Facility exit: June 4, 2015, 2:45 pm

B. Weather Conditions:

Partly sunny, 60 deg F. Most recent rain: 0.75" on June 2 (according to wunderground.com)

C. US EPA Representative(s):

David Turin

D. State/Local Representative(s):

David Burns, MA DEP South East Regional Office

E. Federally Enforceable Requirements Covered During the Inspection:

CWA NPDES

III. Type and Purpose of Inspection

Purpose of the inspection was for the State to conduct an annual compliance inspection. Additional objectives were to meet the Woodard & Curran contract operator staff that have recently taken over the operation of the facility. For EPA, the inspection was also intended as an oversight inspection of the State inspection program.

IV. Facility Description

The Hull Water Pollution Control Facility is a secondary wastewater treatment plant that discharges approximately 2 MGD. Cohasset and Hingham are co-permittees.

V. Inspection

The inspection was announced in advance by MA DEP to facilitate the State inspector's interest in ensuring the attendance of key personnel for the contractors that took over operation of the facility on May 1, 2015. The inspection began at approximately 9 am with an in-briefing with Frank Cavaleri, Area Manager for Woodard & Curran, to whom the EPA inspector presented credentials, and Aram Varjabedian, the Project Manager. The inspectors began with a discussion of reporting requirements and communication expectations. The EPA inspector noted that EPA did not appear to have been copied on the most recent inflow and infiltration report, submitted by the previous operator and indicated that EPA must receive these and all other reports required by the permit.

Cavaleri handed out a plant schematic that was distributed at a recent town council meeting that shows the operational status of the facility treatment equipment. Cavaleri indicated that the operator's highest priority was improvements to health and safety conditions at the facility. Among the pressing health and safety concerns mentioned are occasional high levels of hydrogen sulfide in the headworks and sludge thickening buildings, resulting in the reported hospitalized of a worker. According the Cavaleri, the previous operator failed to reinstall the gas detection system in headworks after the flood and the operators are using portable units to monitor sulfide levels.

With the plant schematic as a guide, Cavaleri discussed a number of capital improvements that will be proposed, including repairs to an influent pump, improvements to the bar screens, repairing a large number of systems, such as odor control and dechlorination that are operated in manual mode because the automated systems don't work. Similarly, according to Cavaleri, one of two primary clarifiers, two of four aeration tanks, one of two secondary clarifiers, one of two gravity thickeners, and one of two sludge holding tanks are off line.

On a site walk, the inspectors were shown the operating and inactive equipment.

Before entering the headworks, Cavaleri went ahead with a portable hydrogen sulfide meter; one of his staff stayed at a landing in the staircase where he could observe the inspectors and staff the entire time that we were in the building. A pair of portable hydrogen sulfide meters are also suspended from a cord above the grit chamber to alert staff to elevated gas levels. Cavaleri indicated that the configuration of the bar screens location of the parshall flume inflow meter make influent flow figures unreliable and indicated that the facility relies on its effluent flow meter to assess influent flow.

Cavaleri pointed out evidence of an overflow from the primary distribution box. Inspector Burns believes this bypass was reported by the previous operator. As noted in the plant schematic and discussed above, the inspectors observed that 1 of the primary clarifiers, 2 of the aeration tanks, one of the secondary clarifiers, 1 of the sludge thickeners and 1 sludge holding tank is offline. There were also questions regarding where the final effluent samples were taken, as a sample collection cooler close to the outfall was burned out. A refrigerated composite sampling unit located approximately ½ way along the chlorine contact chamber appeared operational, with a thermometer in a fridge reading approximately 4 deg. C. No samples were being collected at the time of the inspection. In a subsequent discussion with in-house lab personnel, it appears that samples for everything but TRC are collected at the location ½ way through chlorine contact and TRC is being collected just prior to discharge.

During the exit briefing, Cavaleri indicated that a capital improvement plan is due to the town in November 2015. Expressing his interest in the status of repairs and replacement of equipment to restore system redundancy, the EPA inspector encouraged Cavaleri to keep him informed of repair plans and delays that they encounter.

Following the exit briefing, Cavaleri and Inspectors Burns and Turin went to pump station 3, where the facility is doing a pilot to inject a bio-organic catalyst into the wet well in an effort to reduce the buildup of hydrogen sulfide in the influent on its way to the plant from this pump station.

Throughout the inspection, the State inspector exhibited a high level of familiarity with the operations of wastewater treatment facilities generally and knowledge of the Hull facility, specifically.

End of report.